

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

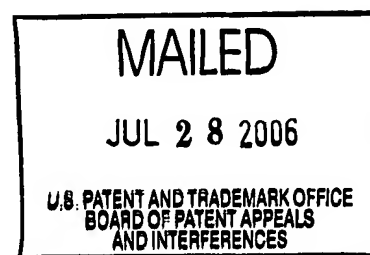
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GARY P. MORRISON, DARVIN R. EDWARDS, and LESLIE STARK

Appeal No. 2006-1954
Application No. 10/034,827

ON BRIEF



Before RUGGIERO, BARRY, and BLANKENSHIP, Administrative Patent Judges.

BLANKENSHIP, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 2, 4-10, 12, 15, 17, 18, 20, and 23, which are all the claims remaining in the application.

We affirm.

BACKGROUND

The invention relates to a vertical stack of semiconductor devices formed by folding a strip-like flexible interconnector assembled with integrated circuit chips, packages, and/or passive components. (Abstract.) Representative claim 15 is reproduced below.

15. A semiconductor assembly comprising:

a strip-like flexible interconnector of electrically insulating material having first and second surfaces;

said interconnector having on said first surface electrically conductive lines for connecting a plurality of separately encapsulated semiconductor devices formed on said first surface adjacent to each other;

said interconnect further having electrically conductive paths extending through said interconnector from said first surface to said second surface, forming electrical ports on said second surface;

said ports comprise first and second pluralities, said first plurality [sic] ports spaced apart by less, center to center, than said second plurality ports are spaced apart, center to center;

said interconnector folded so that said adjacent separately encapsulated semiconductor devices are stacked on top of each other;

at least one additional un-encapsulated semiconductor device having a plurality of first electrical coupling members, said first coupling members attached to said first plurality ports; and

a plurality of second electrical coupling members attached to said second plurality ports, said coupling members suitable for attachment to other parts.

The examiner relies on the following evidence:

Denes

US 5,220,488

Jun. 15, 1993

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Akram	US 6,214,714 B1	Apr. 10, 2001 (filed Sep. 30, 1998)
Tetsuya Inaba (Inaba) ¹	JP 2001-217388	Aug. 10, 2001

Claims 2, 6, 7, 9, 10, 15, 17, 18, and 23 stand rejected under 35 U.S.C. § 102(a) as being anticipated by Inaba.

Claims 4, 12, and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Inaba and Denes.

Claims 5 and 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Inaba and Akram.

We refer to the Final Rejection (mailed Jun. 16, 2004) and the Examiner's Answer (mailed Apr. 8, 2005) for a statement of the examiner's position and to the Brief (filed Aug. 25, 2004) and the Reply Brief (filed May 4, 2005) for appellants' position with respect to the claims which stand rejected.

OPINION

Appellants' arguments in the briefs are based on the position that Inaba has been removed as a reference. Appellants' briefs do not otherwise contest the merits of the rejections.

The USPTO has granted the instant application a filing date of January 3, 2002. According to this record, appellants claim benefit of provisional application 60/258,528,

¹ With machine-generated English translation, provided by the JPO.

filed December 28, 2000.² The examiner does not indicate that the provisional application has been examined to determine whether the document provides 35 U.S.C. § 112, first paragraph support for any or all of the instant claims. However, the examiner has determined that the instant application is not entitled to the benefit of the earlier filing date under 35 U.S.C. § 119(e)(1) because the instant nonprovisional application was filed later than 12 months after the date on which the provisional application was filed. Appellants have not established that the filing date for the instant nonprovisional application should be earlier than January 3, 2002. See Decision on Petition mailed May 4, 2004.

All the claims are rejected over Inaba under 35 U.S.C. § 102(a), or under § 103(a) in combination with a U.S. patent reference. Although appellants have not established benefit of an earlier filing date under 35 U.S.C. § 119, Manual of Patent Examining Procedure (MPEP) § 715.01 (Eighth Ed., Rev. 3, Aug. 2005) notes two ways in which a publication under 35 U.S.C. § 102(a) may be removed as a reference. One way is by proving that the subject matter relied upon in the reference was applicant's own invention. Another way is to prove invention of the claimed subject matter prior to the effective date of the reference by submitting an affidavit or declaration pursuant to 37 CFR § 131.

² We do not find a copy of the provisional application in the instant record.

Appellants have not alleged that the subject matter relied upon in the reference was appellants' own invention. Nor have appellants submitted an affidavit or declaration in accordance with 37 CFR § 131. Instead, appellants argue in the briefs that Pfaff v. Wells Electronics, Inc., 525 U.S. 55, 48 USPQ2d 1641 (1998), provides another way to antedate a reference; i.e., by showing that the invention was "ready for patenting" before the effective date of the reference. In appellants' view, Inaba may be antedated without establishing reduction to practice prior to the effective date of the reference, or conception of the invention prior to the effective date of the reference coupled with due diligence from prior to said date to a subsequent reduction to practice or to the filing of the application, as required by 37 CFR § 131(b).

The U.S. Supreme Court in Pfaff held that the subject patent was invalid because the invention had been on sale for more than one year in this country before Pfaff filed his patent application. The decision thus addressed what is necessary to establish that an invention was on sale in this country within the meaning of 35 U.S.C. § 102(b). The decision did not rule on the present issue of what is necessary to show that an applicant's invention predated a publication applied against the claims under 35 U.S.C. § 102(a). Appellants' arguments thus relate, necessarily, to dicta in the Pfaff opinion.

In any event, appellants submit that according to Pfaff the word "invention" must be interpreted the same way in § 102(a) and § 102(b). "The primary meaning of the word 'invention' in the Patent Act unquestionably refers to the inventor's conception

rather than to a physical embodiment of that idea.” Pfaff v. Wells Electronics Inc., 525 U.S. at 60, 48 USPQ2d at 1644. The Court went on to note that the statute does not contain any express requirement that an invention must be reduced to practice before it can be patented, pointing out that the only specific reference to reduction to practice is found in the interference statute (§ 102(g)). Id.

The Court’s discussion of “reduction to practice,” however, relates to lower courts’ holdings that an invention cannot be “on sale” within the meaning of § 102(b) unless and until it had been reduced to practice. See id. at 60, 48 USPQ2d at 1643-44. The Court of Appeals for the Federal Circuit, our reviewing court, did not require reduction to practice, however. The case under review from the Federal Circuit held that claims were invalid under § 102(b) because the one year grace period began to run when the invention was “substantially complete at the time of sale,” even though the invention had not yet been reduced to practice. The Court granted certiorari because other courts had required a showing of reduction to practice, and because § 102(b) makes no reference to “substantial completion” of an invention. Id.

The Court affirmed the judgement of the Federal Circuit, because the evidence was sufficient to show that the on-sale bar applied because the product was (1) the subject of a commercial offer for sale and (2) the invention was ready for patenting. According to the Court, an invention may be shown “ready for patenting” at least by proof of reduction to practice before the critical date, or by proof that prior to the critical date the inventor had prepared drawings or other descriptions of the invention that were

sufficiently specific to enable a person skilled in the art to practice the invention. Pfaff at 67-68, 48 USPQ2d at 1646-47.

While the primary meaning of the word “invention” refers to the inventor’s conception rather than to a physical embodiment of that idea, we observe there is no textual basis in § 102(b) that “the invention” must be “ready for patenting.” We are not persuaded that Pfaff requires, or even suggests, that because the on-sale bar of § 102(b) may apply when the invention is ready for patenting, the identical “ready for patenting” inquiry applies throughout the Patent Act, or specifically applies to antedating a reference under § 102(a). Nor are we persuaded that any occurrence of “the invention” throughout the Patent Act must be interpreted as something that is “ready for patenting.” In particular, the § 102(a) occurrences of “the invention” -- i.e., “the invention” was patented or described in a printed publication before “the invention” thereof by the applicant by patent -- necessarily refers to two different things. See In re Moore, 444 F.2d 572, 578, 170 USPQ 260, 266 (the first occurrence of “invention” referring to the subject matter encompassed by the claim and the second referring to the event of invention, or the act of producing or coming into possession of the subject matter being claimed).

Different policy considerations in the law of patents often result in seemingly conflicting results. For example, our reviewing court required that for applicants to overcome a prior art reference that is not a statutory bar, applicants must either (1) comply with the substantive requirements of Rule 131, or (2) establish that the relevant

disclosure is of their own work.³ In re Costello, 717 F.2d 1346, 1349, 219 USPQ 389, 391 (Fed. Cir. 1983). “Rule 131 requires proof of either ‘reduction to practice prior to the effective date of the reference, or conception of the invention prior to the effective date of the reference coupled with due diligence from said date to a subsequent reduction to practice or to the filing of the application.’” Id. (quoting 37 CFR § 1.131(b)). As noted supra, however, our reviewing court, even before the Court’s decision in Pfaff v. Wells Electronics, Inc., did not require that an invention be reduced to practice for the on-sale bar of § 102(b) to apply.

Moreover, appellants point to no authority for the view that Pfaff has created a new way to antedate a reference. In particular, appellants point to no precedent from the USPTO, a Federal District Court, the Federal Circuit, or the U.S. Supreme Court in support of the view.

Our reviewing court has, in fact, revisited the issue of antedating a reference at least twice since the Court’s decision in Pfaff, without disturbing the well-known requirements. See Purdue Pharma L.P. v Boehringer Ingelheim GMBH, 237 F.3d 1359, 1365, 57 USPQ2d 1647, 1651 (Fed. Cir. 2001)) (“To antedate (or establish priority) of an invention, a party must show either an earlier reduction to practice, or an earlier conception followed by a diligent reduction to practice.”); Loral Fairchild Corp. v. Matsushita Elec. Indus. Co., 266 F.3d 1358, 1366, 60 USPQ2d 1367 (Fed. Cir. 2001)

³ When the rejection is under 35 U.S.C. § 103(a), a third way to overcome a prior art reference has been added by § 103(c), which is not relevant here.

(“Loral had to show . . . either a reduction to practice, or conception of the invention plus diligence to actual or constructive reduction to practice. This is well-established law, in the Patent Office as in the courts” (Newman, J., concurring)).

Finally, even were we to accept that Pfaff identifies a new way to antedate a reference in accordance with appellants’ arguments, appellants have not established that the instant invention was “ready for patenting” prior to the critical date (or the instant filing date), and would thus fail to remove Inaba as a reference.

Inaba is prima facie a reference under 35 U.S.C. § 102(a). It is appellants’ burden, rather than the examiner’s or the Board’s, to show that Inaba is not prior art. Appellants’ Brief merely refers to an attorney’s declaration alleging the invention was “ready for patenting” prior to the effective date of Inaba, to a copy of an internal invention disclosure document, and to the provisional application (a copy of which was not provided).⁴ We do not find any substantive treatment as to how the invention disclosure (or the provisional application, or a combination thereof) may be considered to show that the invention (as set forth in the instant claims) was “ready for patenting” before the instant filing date. The implication is that the examiner is expected to construct a response to the rejection for appellants, by perhaps producing evidence,

⁴ As the examiner indicates, an application that was abandoned, with which no subsequent application was copending, can serve only as evidence of conception of the invention. See In re Costello, 717 F.2d at 1350, 219 USPQ at 391 (abandonment resulting in a break in continuity strips earlier application of status as constructive reduction to practice).

and by showing that the evidence establishes that the instant claimed invention was “ready for patenting” before the date of publication of Inaba.

A response to overcome a rejection for prima facie unpatentability by antedating a reference, whether based on Rule 131 or appellants' new theory, would require a showing of facts sufficient to establish that which is alleged. With respect to Rule 131, allegations of diligent reduction to practice amount to mere pleading, not the required “showing of facts.” See In re Harry, 333 F.2d 920, 922, 142 USPQ 164, 166 (CCPA 1964). “The Patent Office must have such facts as will enable it and its reviewing courts to judge whether there was construction and when it occurred, or whether there was diligence.” Id. Rule 131 requires a factual showing of completion of the invention before the critical date. In re Borkowski, 505 F.2d 713, 719, 184 USPQ 20, 33-34 (CCPA 1974). Appellants' burden is to explain how exhibits may show completion of the invention. See id. at 719, 184 USPQ at 33 (“It was appellants' burden to explain the content of these notebook pages as proof of acts amounting to reduction to practice. That was not done.”). Vague and general statements in the declaration with respect to what the exhibits show -- i.e., general, conclusory statements such as “conception” and “reduction to practice” -- are insufficient. See id. at 718, 184 USPQ at 33 (vague and general statements amount to mere pleading, unsupported by proof or showing of facts).

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Thus, even assuming that Pfaff might identify a new and different showing of facts that may serve to antedate a reference, such facts have not been shown by appellants on this record.

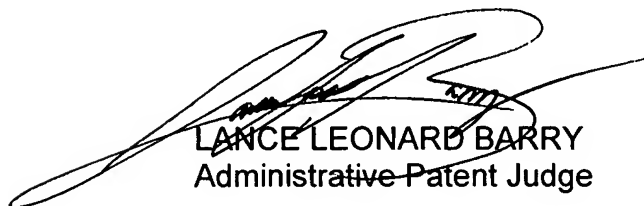
CONCLUSION

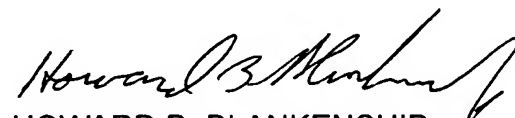
Because no error has been shown in the rejection, the rejection of claims 2, 4-10, 12, 15, 17, 18, 20, and 23 under 35 U.S.C. § 102(a) or § 103(a) is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a). See 37 CFR § 1.136(a)(1)(iv).

AFFIRMED


JOSEPH F. RUGGIERO
Administrative Patent Judge


LANCE LEONARD BARRY
Administrative Patent Judge


HOWARD B. BLANKENSHIP
Administrative Patent Judge

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